

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

SKYLINE SOFTWARE SYSTEMS, INC.,

Plaintiff,

v.

KEYHOLE, INC., and
GOOGLE INC.

Defendants.

CIVIL ACTION NO. 06-10980 DPW

**MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF DEFENDANTS'
MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT**

[PUBLIC REDACTED VERSION]

Nelson G. Apjohn (BBO No. 020373)
NUTTER McCLENNEN & FISH LLP
World Trade Center West
155 Seaport Boulevard
Boston, MA 02210
(617) 439-2000
Fax: (617) 310-9000

Attorneys for Defendants and
Counterclaimants
KEYHOLE, INC. and GOOGLE INC.

Of Counsel

Darryl M. Woo, admitted *pro hac vice*
Michael J. Sacksteder, admitted *pro hac vice*
Heather N. Mewes, admitted *pro hac vice*
Carolyn Chang, admitted *pro hac vice*
Saundra L.M. Riley, admitted *pro hac vice*
FENWICK & WEST LLP
Embarcadero Center West
275 Battery Street
San Francisco, CA 94111
Tel. (415) 875-2300
Fax (415) 281-1350
email: dwoo@fenwick.com

TABLE OF CONTENTS

	Page(s)
I. INTRODUCTION	1
II. STATEMENT OF FACTS	2
A. The '189 Patent	2
B. The Accused Google Earth Products	4
1. The Google Earth Client Software.....	4
2. Google Earth Fusion, Google Earth Server, and the Geo Coder Server	6
III. LEGAL STANDARD.....	7
IV. ARGUMENT	9
A. Google Earth Fusion, Google Earth Server, and the Geo Coder Server Do Not Infringe the Asserted Claims of the '189 Patent.....	9
B. Google Earth (Client Software) Does Not Infringe the '189 Patent.....	10
1. Google Earth Does Not Infringe Any of the Asserted Claims of the '189 Patent For Several Independent Reasons.....	10
a. Google Earth Does Not Meet the “downloading from a remote server one or more additional data blocks ... if the provided block from the local memory is not at the indicated resolution level” Limitation	10
b. Google Earth Does Not Meet the “receiving from the renderer one or more coordinates in the terrain along with indication of a respective resolution level” Limitation.....	12
c. Google Earth Does Not Have “data blocks belonging to a hierarchical structure”	14
d. Google Earth Does Not Have “data blocks describing three- dimensional terrain” as Skyline Has Interpreted the Limitation.....	16
2. Google Earth Does Not Infringe Claims 3 and 14 for the Additional Reason that It Does Not “download[] ... wherein blocks of lower resolution levels are downloaded before blocks of higher resolution levels”	17

TABLE OF CONTENTS
(continued)

	Page(s)
3. Google Earth Does Not Infringe Claims 7-9, 18-19, and 22-24 for the Additional Reason that It Does Not “download[] from a remote server excess blocks not currently needed by the renderer to fill up the local memory when not downloading blocks required by the renderer”	19
V. CONCLUSION.....	20

TABLE OF AUTHORITIES

Page(s)

Cases

<i>Bayer AG v. Elan Pharm. Research Corp.</i> , 212 F.3d 1241 (Fed. Cir. 2000).....	7
<i>Celotex Corp. v. Catrett</i> , 477 U.S. 317 (1986).....	7
<i>General Mills, Inc. v. Hunt-Wesson, Inc.</i> , 103 F.3d 978 (Fed. Cir. 1997).....	8
<i>Johnston v. IVAC Corp.</i> , 885 F.2d 1574 (Fed. Cir. 1989).....	7
<i>Lockheed Martin Corp. v. Space Sys./Loral, Inc.</i> , 324 F.3d 1308 (Fed. Cir. 2003).....	8, 14
<i>Markman v. Westview Instruments, Inc.</i> , 52 F.3d 967 (Fed. Cir. 1995).....	7
<i>Matsushita Elec. Indus. Co. v. Zenith Radio Corp.</i> , 475 U.S. 574 (1986).....	8
<i>Moore U.S.A., Inc. v. Standard Register Co.</i> , 229 F.3d 1091 (Fed. Cir. 2000).....	11, 15, 20
<i>Novartis Corp. v. Ben Venue Labs., Inc.</i> , 271 F.3d 1043 (Fed. Cir. 2001).....	7, 12
<i>Pharmacia & Upjohn Co. v. Mylan Pharms., Inc.</i> , 170 F.3d 1373 (Fed. Cir. 1999).....	11, 19
<i>Texas Instruments Inc. v. United States Int'l Trade Comm'n</i> , 988 F.2d 1165 (Fed. Cir. 1993).....	8
<i>V-Formation, Inc. v. Benetton Group SPA</i> , 401 F.3d 1307 (Fed. Cir. 2005).....	1, 7
<i>Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.</i> , 520 U.S. 17 (1997).....	8

Rules

Fed. R. Civ. P. 26.....	12
Fed. R. Civ. P. 56(c)	7

I. INTRODUCTION

To find patent infringement, *each and every* limitation of an asserted claim must be found in the accused product. *V-Formation, Inc. v. Benetton Group SPA*, 401 F.3d 1307, 1312 (Fed. Cir. 2005). But even Skyline's expert has no opinion as to whether using the Google Earth client software meets each and every limitation of the asserted claims of the '189 patent. Chang Decl., Ex. 15 at 95:21-96:3, 98:4-21 (stating [REDACTED] [REDACTED]). Performing *most* of the steps is not enough.

Skyline filed this patent infringement lawsuit against Google simply because the Google Earth client software displays three-dimensional images of the Earth. The inventor of Skyline's '189 patent, however, [REDACTED] [REDACTED]. *Id.*, Ex. 19 at 111:12-112:11. Indeed, designing a computer rendering system that manages massive amounts of data requires making choices. One choice, made by the '189 patent, is to organize data in a strict resolution hierarchy, enabling easier retrieval of data. Such benefits come with associated costs, however. If more up-to-date data is acquired for Boston, for instance, existing data may have to be re-organized to ensure that the carefully called-for organization of data is maintained. Google Earth's designers made a different choice, [REDACTED]

Deciding how to retrieve data when rendering implicates other design choices. The '189 patent tries to minimize downloading data from a remote computer. To accomplish this, the '189 patent system must determine if, in fact, the data already retrieved is sufficient to draw the current view. Again, Google Earth makes a different choice. [REDACTED]

Yet, such costs eliminate the determinations required by the '189 patent approach.

The choices made by the '189 patent inventors are reasonable. So too are the choices that the designers of Google Earth made. The key is that they are different, resulting in fundamentally different systems. For these, and several additional reasons explained in more detail below, Google Earth does not infringe the asserted claims of the '189 patent. Skyline's attempts to save its infringement claims by ignoring these fundamental differences, re-interpreting the Court's constructions, or reading limitations out of the patent, do not raise a genuine dispute of material fact. Accordingly, this Court should grant Google's motion and enter summary judgment of noninfringement.

II. STATEMENT OF FACTS

A. The '189 Patent

An object of the '189 patent was to provide methods and apparatuses for streaming data required for rendering three-dimensional terrain images on a remote computer. *Id.* at col. 2:11-14. Methods of streaming images from a remote computer and computer rendering of three-dimensional terrain images were well-known in the art, however. *Id.* at col. 1:34-45. Thus, the '189 patent is limited to a very specific way of “providing data blocks describing three-dimensional terrain to a renderer, the data blocks belonging to a hierarchical structure.”

Undisputed Facts ¶¶ 31, 38.

Skyline asserts infringement of claims 1, 3, 7, 8, 9, 12, 14, 18, 19, 22, 23, and 24. *Id.* ¶ 1.

All of the asserted claims contain the same core limitations.¹ Each claim requires that the data blocks describing three-dimensional terrain belong to a hierarchical structure. *Id.* ¶ 31. Each of the data blocks in the hierarchical structure is referenced by coordinates corresponding to one of the terrain points contained in the terrain block. '189 patent at col. 9:25-39. This allows the renderer of '189 patent to order specific blocks by their corresponding coordinates and resolution level. *Id.* at col. 11:21-30. Consequently, each and every claim of the '189 patent requires “receiving from the renderer one or more coordinates in the terrain along with indication of a respective resolution level.” Undisputed Facts ¶ 21.

In response to the renderer's request, a first data block corresponding to the specified coordinates is provided from the local memory of the user's computer. '189 patent at col. 3:58-61; 11:62-65. As a result, the invention claimed by the '189 patent avoids having to download data blocks from a remote server if the data block with the indicated resolution level is available in local memory. *See id.* at cols. 3:50-53, 60-61; 11:62-64. If, however, the first data block is determined not to be at the resolution level indicated by the renderer, the '189 patent invention will retrieve additional data blocks from a remote server. Conditioning the download of additional data blocks from a remote server upon a determination that the data block from local memory is not at the indicated resolution level was a feature emphasized by the applicants during prosecution of the '189 patent application in distinguishing the prior art. Undisputed Facts ¶ 19. Thus the claims require “downloading from a remote server one or more additional data blocks ... if the first block from local memory is not at the indicated resolution level.” *Id.* ¶ 11.

¹ All of the issued claims of the '189 patent were originally drafted as claims depending from the same “core” independent claims, consisting of one method claim and an apparatus performing the method. Chang Decl., Ex. 2 at GOOG 0059-0066 (*see* original claim 1 and original claim 31). While later split into further independent claims, the various issued claims of the '189 patent still include the same core, with different embodiments of the invention having their own additional specific limitations.

In addition to these core limitations, the asserted claims of the '189 patent contain other limitations particular to the embodiment being claimed. For example, method claim 3 (and apparatus claim 14) requires lower resolution data blocks to be downloaded before higher resolution data blocks. '189 patent, claim 3 at col. 16:66-67. Method claim 7 and apparatus claim 18, and their dependent claims require the download of "excess blocks not currently needed by the renderer to fill up the local memory when not downloading blocks required by the renderer." *Id.*, claim 7 at col. 17:58-61.

B. The Accused Google Earth Products

Skyline alleges that the particular methods of providing data blocks describing three-dimensional terrain claimed in the '189 patent are infringed by the accused Google Earth products, specifically the Google Earth client software ("Google Earth"), Google Earth Fusion, Google Earth Server, and the Geo Coder Server. Chang Decl., Ex. 3.

1. The Google Earth Client Software

Google Earth is the application that runs on an end-user's computer and allows the user to access geographic information and imagery stored either locally or on a remote database for display on the user's local computer. It does not, however, provide or download data in the manner set forth in the '189 patent claims.

Google Earth [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Unlike in the '189 patent, Google Earth [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

² While the parties dispute whether this value is an “indication of a respective resolution level,” Google does not currently move for summary judgment on this ground and reserves its right subsequently to present such evidence.

³ Google Earth [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Thus, while the '189 patent downloads from a remote server if the data it needs is not in local memory, [REDACTED]

2. Google Earth Fusion, Google Earth Server, and the Geo Coder Server

While Skyline accuses Google Earth Fusion, Google Earth Server, and the Geo Coder Server, none of them performs any steps claimed in the '189 patent. Google Earth Fusion is the software product that allows users to build their own database. Undisputed Facts ¶¶ 6-7. It can convert data that may exist in different formats and integrate data obtained from different vendors, producing files that can be stored in a database. *Id.* ¶ 6.

Google Earth Server is the software that receives requests from the Google Earth client. *Id.* ¶ 8. It simply returns files that were requested by the client application. *Id.*

The Geo Coder Server processes search requests. A user may enter an address or place name when using Google Earth, [REDACTED]

[REDACTED]

[REDACTED] It does not use data blocks describing three-dimensional terrain.

III. LEGAL STANDARD

“Summary judgment is appropriate when, after opportunity for discovery and upon motion, there is no genuine dispute of material fact for trial and one party is entitled to judgment as a matter of law.” *Novartis Corp. v. Ben Venue Labs., Inc.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001); Fed. R. Civ. P. 56(c). Google is entitled to summary judgment of noninfringement because Skyline cannot put forth evidence to support a finding that the limitations of the asserted claims are met by the accused Google Earth products, either literally or equivalently. *See Johnston v. IVAC Corp.*, 885 F.2d 1574, 1578 (Fed. Cir. 1989).

Determination of patent infringement entails a two-step analysis: (1) claim construction, a legal matter for the Court; and (2) application of the construed claim to the accused product, a factual question. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 984 (Fed. Cir. 1995). The Court already construed the disputed terms of the '189 patent in its March 24, 2006 and November 16, 2006 Memoranda, leaving only the comparison of the asserted claims of the '189 patent to the accused Google Earth products. An accused product can only be found to infringe a claim if the product embodies each and every limitation of the claim, either literally or by a substantial equivalent. *V-Formation*, 410 F.3d at 1312. If any one limitation is absent from the accused product, “there is no literal infringement as a matter of law.” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000).

Because Skyline bears the burden of proving infringement, Google is entitled to judgment as a matter of law merely upon a showing that Skyline cannot establish its infringement contentions by a preponderance of the evidence. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986) (“The moving party is ‘entitled to judgment as a matter of law’ because the nonmoving party has failed to make a sufficient showing on an essential element of [its] case with respect to which [it] has the burden of proof”). To defeat this motion for summary

judgment, Skyline must therefore “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986). The issue of infringement is especially susceptible to summary judgment when facts pertaining to the operation of the accused device are undisputed because then infringement is purely a question of law. *General Mills, Inc. v. Hunt-Wesson, Inc.*, 103 F.3d 978, 983 (Fed. Cir. 1997). Here, with respect to the issues raised by this motion, there is no genuine dispute as to how the accused Google Earth products operate.

In addition, Skyline cannot as a matter of law establish infringement under the doctrine of equivalents. *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 n. 8 (1997) (stating “the various legal limitations on the application of the doctrine of equivalents are to be determined by the court”). Under the all-elements rule, “there can be no infringement under the doctrine of equivalents if even one limitation of a claim or its equivalent is not present in the accused device.” *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1321 (Fed. Cir. 2003). Furthermore, “[u]nmistakable assertions” made by applicants during prosecution, whether or not required to secure allowance of the claim, preclude the patentee from later asserting equivalency. *Texas Instruments Inc. v. United States Int’l Trade Comm’n*, 988 F.2d 1165, 1174 (Fed. Cir. 1993).

For the reasons set forth below, Skyline cannot identify any specific evidence that raises any material factual dispute, and based on the undisputed evidence, the accused Google Earth products do not perform each and every limitation of the asserted claims.⁴ Therefore, no reasonable jury can find that the accused Google Earth products infringe the ’189 patent, and Google is entitled to summary judgment of noninfringement.

⁴ Should the Court deny Google’s motion for summary judgment, at trial Google intends to present additional noninfringement arguments not addressed by this motion.

IV. ARGUMENT

A. Google Earth Fusion, Google Earth Server, and the Geo Coder Server Do Not Infringe the Asserted Claims of the '189 Patent

Skyline includes Google Earth Fusion, Google Earth Server, and the Geo Coder Server among the accused Google Earth products. Undisputed Facts ¶ 3. However, Skyline has not identified how any of these products meet any of the limitations of the '189 patent claims. *Id.* ¶ 4. Skyline's expert cannot articulate the bases for his infringement opinion with respect to these products. *Id.* (stating "[REDACTED]"). In fact, Skyline's expert does not even recognize the Geo Coder Server as an accused product. *Id.* ¶ 5.

The asserted claims of the '189 patent are directed to "providing data blocks describing three-dimensional terrain to a renderer." *Id.* ¶ 2. Google Earth Fusion, however, is a software product that processes raw data, configuring data sets and creating databases of geographically referenced information and data. *Id.* ¶ 6. As Skyline does not dispute this, it has no argument that Google Earth Fusion (or a user of the product) performs any limitation of the asserted claims of the '189 patent, let alone each and every limitation. *Id.* ¶ 7.

Google Earth Server is the software product that communicates with the Google Earth client and serves data stored on a remote database to the client computer. *Id.* ¶ 8. Skyline cannot show how that meets any limitation of the asserted claims. Nor can it establish that the Geo Coder Server provides data blocks describing three-dimensional terrain to a renderer. The Geo Coder Server receives search requests from the Google Earth client and conducts searches based on an address, city name, street name, or other user input, [REDACTED]. *Id.* ¶ 9.

There is no legitimate reason why Google Earth Fusion, Google Earth Server, and the

Geo Coder Server should be at issue in this lawsuit. This Court should enter summary judgment of noninfringement with respect to these products.

B. Google Earth (Client Software) Does Not Infringe the '189 Patent

1. Google Earth Does Not Infringe Any of the Asserted Claims of the '189 Patent For Several Independent Reasons

a. Google Earth Does Not Meet the “*downloading from a remote server one or more additional data blocks ... if the provided block from the local memory is not at the indicated resolution level*” Limitation

Each of the asserted claims of the '189 patent requires “downloading from a remote server one or more additional data blocks ... if the provided block from the local memory is not at the indicated resolution level.” Undisputed Facts ¶ 11. The Court construed this limitation to require there be “some determination that the block provided from local memory is not at the indicated level” before additional data blocks are downloaded from a remote server. *Id.* ¶ 12. Thus, the Court recognized there must be “some determination as to whether the conditional is satisfied before actions predicated on it are taken.” *Id.* ¶ 13.

Google Earth, [REDACTED]

[REDACTED]. In fact, while the patented method avoids downloading data from a remote server when the block from local memory is at the indicated resolution level, [REDACTED]

[REDACTED]. Undisputed Facts ¶¶ 15-18.

Looking specifically to Skyline’s infringement contentions, it is clear that Google Earth does not make the determination as to whether the conditional set forth in the '189 patent claims is satisfied. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]. Moreover,
this is a distinction *with* a difference – [REDACTED]

[REDACTED] Thus, the Google Earth client does not test the conditional required by the asserted claims of the '189 patent, and thus does not infringe. *Feiner Decl.* ¶ 20.

Google Earth also does not meet the “downloading ... if” limitation under the doctrine of equivalents. The conditional claimed in the '189 patent is intended to avoid downloading from a remote server when the required data block is already in local memory. The '189 patent applicants emphasized this determination during prosecution in distinguishing prior art, and Skyline is now precluded from claiming equivalence when such a determination is not made. *Undisputed Facts* ¶ 19; *see Pharmacia & Upjohn Co. v. Mylan Pharms., Inc.*, 170 F.3d 1373, 1377-79 (Fed. Cir. 1999) (finding prosecution history estoppel applied where patentee made statements that “would reasonably be interpreted as a ‘clear and unmistakable surrender’”).

The tests performed by Google Earth are not substantial equivalents of the claimed conditional. [REDACTED]

[REDACTED] (as is required by the '189 patent claims). *See Moore U.S.A., Inc. v. Standard Register Co.*, 229 F.3d 1091, 1106 (Fed. Cir. 2000) (“it would defy logic to conclude that a minority – the very antithesis of a majority – could be insubstantially different from a claim limitation requiring a majority”). Thus, Google Earth downloads data in a substantially different way, [REDACTED]

[REDACTED]. *Feiner Decl.* ¶ 20. In any event,

⁵ [REDACTED].”
Google does not move for summary judgment separately on this ground, but will present evidence to this effect at trial should the Court deny Google’s motion.

Skyline's expert has not disclosed the factual bases for his equivalence opinions, and such conclusory opinions cannot raise a genuine dispute of fact. *See Novartis Corp.*, 271 F.3d at 1051 (stating that a conclusory expert opinion submitted without factual basis cannot raise a dispute of fact sufficient to defeat summary judgment).⁶ Accordingly, Google respectfully requests this Court grant summary judgment that Google Earth does not infringe any of the asserted claims of the '189 patent.

b. Google Earth Does Not Meet the “*receiving from the renderer one or more coordinates in the terrain along with indication of a respective resolution level*” Limitation

Summary judgment of noninfringement is also appropriate because Google Earth does not “receiv[e] from the renderer one or more coordinates in the terrain along with indication of a respective resolution level.” Because the '189 patent invention relates to a system in which a renderer requests specific data blocks by coordinates and a resolution level, each of the asserted claims recites this limitation. Undisputed Facts ¶ 21.

The Court construed the '189 patent “renderer” to be a “software and/or hardware object that performs at least the following functions: (1) determining and providing to another object the required coordinates in the terrain along with a respective resolution level; (2) receiving the data blocks corresponding to the specified coordinates; and (3) using the received data blocks to display a three-dimensional image.” *Id.* ¶ 22. Consistent with this construction, the Court clarified that “receiving from the renderer” means “something distinct from the renderer receiving from the renderer.” *Id.* ¶ 23.

Google Earth does not meet this limitation for two reasons. First, Skyline cannot meet its burden of establishing that “something distinct from the renderer” receives coordinates and a

⁶ In fact, Skyline's expert did not provide a factual basis for his equivalence opinions for any of the limitations of the asserted claims. *See generally* Chang Decl., Exs. 7, 9. Thus, Skyline's expert opinions cannot raise a genuine issue of fact with respect to the doctrine of equivalents for any of the claim limitations discussed in this motion. Fed. R. Civ. P. 26.

resolution level from the renderer. Specifically, Skyline identifies the same software routine as the “renderer” and the “something distinct from the renderer” that receives coordinate and a resolution level from the renderer. For example, at the same time Skyline’s expert [REDACTED]

[REDACTED] Thus, what Skyline claims is the “renderer” in Google Earth actually provides coordinates and a resolution level to itself, not another object, as required by the claims. *Id.* ¶¶ 27-28; Feiner Decl. ¶ 27. Even Skyline admits that the ’189 patent “renderer” cannot provide coordinates and a resolution level to itself, *yet that is exactly what its infringement contentions attempt to do*. Undisputed Facts ¶ 29. Thus, Google Earth does not “receiv[e] from the renderer coordinates in the terrain along with indication of a respective resolution level.” Feiner Decl. ¶¶ 27, 29.

Second, Google Earth does not have the “renderer” required by the asserted claims of the ’189 patent. At the same time Skyline tries to characterize a single routine as two different objects, it also tries to group disjoint source code routines into a single object. Undisputed Facts ¶ 24. Even assuming the source code portions identified by Skyline actually perform the stated functions of the “renderer” (which they do not),⁸ Skyline ignores that the ’189 patent requires all three functions of the “renderer” to be performed by a single object or thing. Feiner Decl. ¶¶ 28-29. The different code sections identified by Skyline do not, however constitute a single object.

⁷ Skyline’s expert states that [REDACTED]

Id. (see, Chang Decl., Ex. 15 at 271:9-272:17).

⁸ While not presently asserted as a ground for this motion, Google has ample evidence that the parts of the source code identified by Skyline do not perform the stated functions of the “renderer” as required by the Court’s construction.

For example, Skyline [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Such disjoint parts would not constitute a single object, and thus Skyline has not identified any one thing that performs all three functions of the “renderer.” *Id.* ¶ 26.

Skyline’s doctrine of equivalents allegations also fail as a matter of law. Skyline’s infringement contentions do not identify “something distinct from the renderer” that receives coordinates and a resolution level, as is required by all of the asserted claims. Because the alleged equivalent completely omits a limitation, there can be no infringement under the doctrine of equivalents. *Lockheed*, 324 F.3d at 1321 (stating all-elements rule with respect to doctrine of equivalents). Accordingly, summary judgment is appropriate.

c. Google Earth Does Not Have “data blocks belonging to a hierarchical structure”

Each of the asserted claims of the ’189 patent requires the provision of “data blocks belonging to a hierarchical structure.” Undisputed Facts ¶ 31. Applying the Court’s construction of this limitation, the asserted claims of the ’189 patent require “data blocks that are organized into multiple levels of resolution, whereby each level contains data blocks at the same resolution, and each successive level contains data blocks of a higher resolution than those in the preceding level.” *Id.* ¶ 32.

The evidence establishes, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. This runs contrary to the requirement that “each level contain data blocks at the same resolution.” Feiner Decl. ¶¶ 32, 34.

Skyline also admits that [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] This runs contrary to the requirement that “each successive level contains data blocks of a higher resolution than those in the preceding level.” Feiner Decl. ¶¶ 33, 34.

Therefore, there is no dispute that Google Earth does not meet the “data blocks belonging to a hierarchical structure” limitation. Furthermore, Google Earth’s data structure is not equivalent to the claimed “hierarchical structure.” The Court’s construction requires that “each level contain data blocks at the *same* resolution.” [REDACTED]

[REDACTED] A structure that is the opposite of what is claimed cannot be an equivalent. *See Moore U.S.A., Inc.*, 229 F.3d at 1106.

Because Google Earth does not meet the “data blocks belonging to a hierarchical structure” limitation either literally or by a substantial equivalent, this Court should grant Google’s motion for summary judgment of noninfringement.

d. Google Earth Does Not Have “data blocks describing three-dimensional terrain” as Skyline Has Interpreted the Limitation

The asserted claims of the ’189 patent are all directed to “providing data blocks describing three-dimensional terrain to a renderer.” Undisputed Facts ¶ 38. The Court construed “terrain” as “the surface features of an area of land, an object, or a material, including color, elevation, and existing objects or structure on the land, object or material.” *Id.* ¶ 39. Accordingly, “data block describing three-dimensional terrain” was construed to mean “a block or collection of data or digital information that represents or describes a section of three-dimensional terrain at a particular resolution level and that includes any additional data overlaid on the digital image of the terrain, such as altitude, labels or optional objects.” *Id.* ¶ 40.

In an attempt to overcome Google’s anticipation arguments, Skyline has interpreted the Court’s constructions to mean that “terrain,” and therefore a “data block describing three-dimensional terrain,” must contain both elevation data and color data (i.e., texture or imagery data). Specifically, Skyline’s expert states that in the ’189 patent “both color (imagery) and elevation data are downloaded from the remote server according to the method described in the ’189 Patent. Downloading only one of the two types of data pursuant to this method (i.e. imagery or elevation) does not then constitute ‘providing data blocks describing three dimensional terrain dataset [sic].’” *Id.* ¶ 41.

Skyline’s expert’s opinion runs counter to the Court’s claim construction, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Under Skyline’s interpretation, such data blocks containing only color data cannot be “data blocks describing three-dimensional terrain,” [REDACTED]

[REDACTED]

[REDACTED] Thus, under Skyline's interpretation of the Court's construction, Google Earth does not have "data blocks describing three-dimensional terrain." Feiner Decl.

¶ 38.

Skyline cannot have its cake and eat it too. Should Skyline succeed in overcoming prior art by misreading the Court's claim construction of "terrain" and "data block describing three-dimensional terrain" to require both elevation and color, then it is undisputed that Google Earth does not meet this limitation and the Court should grant summary judgment of noninfringement.⁹

2. Google Earth Does Not Infringe Claims 3 and 14 for the Additional Reason that It Does Not "download[] ... wherein blocks of lower resolution levels are downloaded before blocks of higher resolution levels"

In addition to the core limitations discussed in Section V.A.1. above, claims 3 and 14 of the '189 patent further require "downloading ... wherein blocks of lower resolution levels are downloaded before blocks of higher resolution levels." Undisputed Facts ¶ 44. Read in light of the Court's construction of "downloading," claims 3 and 14 of the '189 patent require blocks of lower resolution levels not only to be requested, but also received before blocks of higher resolution levels. *Id.* ¶ 45 (construing "downloading" to mean "requesting over a network from a separate computer and receiving on a local computer").

Google Earth, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁹ Should the Court disagree with Skyline's interpretation, then the prior art discloses the "data blocks describing three-dimensional terrain" limitation of the asserted claims of the '189 patent. *See Defendants' Motion for Summary Judgment of Anticipation Based on the Public Use of TerraVision* at 12-13.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Undisputed Facts ¶ 47. Thus, there is no dispute that Google Earth does not request blocks of lower resolution levels before blocks of higher resolution levels.

Skyline also admits that, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *Id.* That lower resolution data may sometimes be requested and received before higher resolution data is insufficient to meet this limitation. Feiner Decl. ¶ 42. Even under a random download ordering scheme, lower resolution data will on occasion be requested and received before higher resolution data. *Id.* Such chance ordering is not a method “wherein blocks of lower resolution levels are downloaded before blocks of higher resolution levels” as contemplated by claims 3 and 14, and is not enough to establish infringement. *Id.*

Nor can Skyline prove infringement by reliance on the doctrine of equivalents. During prosecution of the '189 patent, to overcome a prior art rejection, the applicants repeatedly emphasized that the cited prior art did not disclose “a downloading order based on resolution levels” and did not require a download order “from the lowest resolution to the highest resolution.” Undisputed Facts ¶ 50. Skyline is thus estopped from asserting [REDACTED]

[REDACTED] is equivalent to the

download order required by claims 3 and 14. *See Pharmacia & Upjohn Co.*, 170 F.3d at 1377-79.

For these reasons, it cannot be disputed that Google Earth does not infringe claims 3 and 14, either literally or by a substantial equivalent, and this Court should grant summary judgment of noninfringement with respect to claims 3 and 14 of the '189 patent.

3. Google Earth Does Not Infringe Claims 7-9, 18-19, and 22-24 for the Additional Reason that It Does Not “download[] from a remote server excess blocks not currently needed by the renderer to fill up the local memory when not downloading blocks required by the renderer”

Skyline claims Google Earth infringes claims 7 and 18 (and their dependent claims)

Undisputed Facts

¶ 54. There is no dispute that Google Earth does this. Claims 7 and 18 and their dependent claims, however, require that the download of excess data blocks take place “when not downloading blocks required by the renderer.” *Id.* ¶ 52. The Court has construed “when not downloading blocks required by the renderer” to mean “during periods of time when the local computer, or a connection thereof, is not downloading data blocks in response to coordinates received from the renderer.” *Id.* ¶ 53.

Skyline claims that the “when not downloading blocks required by the renderer” limitation is met because for any single network connection, blocks not needed to display the current view will necessarily occupy the network connection at times different from those in which the blocks required by the renderer are being transmitted. *Id.* ¶ 55. As it is necessarily the case that a single network connection can only download one block at a time, Skyline’s interpretation would render the “when not downloading blocks required by the renderer” limitation completely superfluous. *Feiner Decl.* ¶ 48.

The “when not downloading blocks required by the renderer” limitation must mean

something else, and the Court recognized this. In construing the limitation, the Court explained that because

the '189 patent allows for a constantly changing user viewpoint, there will often be a queue of data blocks, some of which may not be needed any longer, that have been requested by the renderer, but not yet downloaded. Until these requested blocks have finished downloading, excess blocks will not be downloaded to fill the local memory. *See* Fig. 8 ('Queue Empty?' No --> Download blocks from queue; Yes → Download excess surrounding blocks). Therefore, files which are, or were, 'required by the renderer' may include data blocks not required for the currently displayed view.

Undisputed Facts ¶ 56.

As depicted by Figure 8 of the '189 patent, the "when not downloading blocks required by the renderer" limitation claims a secondary downloading scheme in which excess data blocks would be downloaded after the download queue generated in response to coordinates received from the renderer was empty. *Id.*; '189 patent, Fig. 8. Thus, at least two downloading schemes are required to meet the limitations of claims 7-9, 18-19, and 22-24.

Google Earth [REDACTED]

[REDACTED] *Id.* ¶ 57. Therefore, the undisputed evidence establishes that Google Earth does not infringe claims 7-9, 18-19, and 22-24 of the '189 patent. *Feiner* Dec. ¶ 49.

Skyline also cannot establish infringement under the doctrine of equivalents.

Downloading data not needed for the current view when downloading blocks required by the renderer certainly cannot be an equivalent of downloading "when *not* downloading blocks required by the renderer." *See Moore U.S.A., Inc.*, 229 F.3d at 1106 (finding that the opposite of a limitation cannot constitute a substantial equivalent).

V. CONCLUSION

For the foregoing reasons, Google respectfully requests this Court to enter summary judgment that the accused Google Earth products do not infringe the '189 patent.

Dated: January 19, 2007

Respectfully submitted,

By: /s/Darryl M. Woo
Darryl M. Woo
FENWICK & WEST LLP
Embarcadero Center West
275 Battery Street
San Francisco, CA 94111
Tel. (415) 875-2300
Fax (415) 281-1350
email: dwoo@fenwick.com

Attorneys for Defendants and
Counterclaimants
KEYHOLE, INC. and GOOGLE INC.

Certificate of Service

I hereby certify that, on January 19, 2007, I caused a true and accurate copy of the foregoing document to be served upon all counsel of record for each party by complying with this Court's Administrative Procedures for Electronic Case Filing.

By: /s/Darryl M. Woo
Darryl M. Woo